Mental Health Care Use by Soldiers Conducting Counterinsurgency Operations

Larry Applewhite, PhD*; LTC Nathan Keller, MS USA*; Adam Borah, MD†

ABSTRACT Counterinsurgency (COIN) has become the cornerstone of the military's strategy to combat terrorist threats. COIN operations are complex and often expose soldiers to unfamiliar stressors as they fight the enemy while developing and maintaining rapport with the local populace. Utilizing a retrospective record review protocol, we examined 282 mental health files of soldiers assigned to a brigade combat team that operated from a large forward operating base in Iraq during the counterinsurgency campaign. Most reported sleep disturbance, depression, anxiety, irritability, and conflict with supervisors related to either operational stress, exposure to direct combat, or home front concerns. Most received brief individual supportive therapy or attended solution-focused group counseling emphasizing life skills training, post-traumatic stress treatment, women's support, or relationship skills. Psychopharmacologic treatment was an essential adjunct to the counseling program. Results indicate that supporting a COIN deployment requires a comprehensive mental health program that can respond to a wide range of mental health problems.

INTRODUCTION

The wars in Afghanistan and Iraq began as conventional operations aimed at overthrowing regimes deemed hostile to the United States in the post-9/11 environment. Then, in January 2007, coinciding with a surge in troop deployments, the Army implemented a counterinsurgency (COIN) strategy in Operation Iraqi Freedom (OIF), which has become the cornerstone of the military's strategy to combat terrorist threats. Shifting to a COIN strategy has forced people to think differently about warfare. Simply applying overwhelming force to destroy an enemy is incompatible with the strategic objectives of securing human rights and ensuring the basic needs of food, water, shelter, and health care are available to local residents.² The Army's field manual on COIN underscores this point by declaring "arguably, the decisive battle is for the people's minds." Under COIN doctrine, the local populace's perception of military action can determine its effectiveness, and with the instant availability of multimedia information accessible through the Internet, any tactical encounter can have immediate strategic implications.4 Therefore, in a COIN environment, the conduct of individual soldiers can produce farreaching consequences.

Implementing an unconventional strategy required soldiers to adapt tactically and mentally from conducting high-intensity raids with overwhelming firepower to exercising restraint in accordance with more restrictive rules of engagement. The stress that accompanied the transition may be reflected in the Mental Health Advisory Team (MHAT) survey conducted during OIF 2006–2008 that found 18% of junior enlisted soldiers screened positive for acute stress, depression, and anxiety.⁵ Furthermore, the Indian Army's

extensive experience with low-intensity conflict has shown that prolonged periods conducting COIN operations are related to depression, alcohol abuse, and other psychological distress.⁶ Fear of torture if captured, the demands of operating in an uncertain environment, and concerns over domestic stresses also have been shown to contribute to emotional difficulties. With strategic success inextricably linked to the actions of individual soldiers, increasing our understanding of the psychological implications associated with working in a COIN environment is a necessity. Although the psychosocial sequelae experienced during earlier phases of OIF have been well chronicled, 8-10 knowledge of the psychological consequences of the COIN campaign has yet to be as fully developed. In this study, we focus on the personal impact of a COIN deployment by examining mental health care use by soldiers from an active component brigade combat team (BCT), during the critical first year of COIN operations in Iraq. Descriptions of the characteristics of individuals who received care, common referral sources, frequent reasons for seeking assistance, and the type of treatment provided are identified. We conclude with a discussion of the implications for planning mental health support to future COIN deployments.

OPERATIONAL STRESS AND COIN

Bartone and others, through their identification of primary dimensions of stress in modern military operations, have provided a framework for understanding the stress encountered under COIN conditions. Generally described as isolation, ambiguity, powerlessness, boredom, danger, and workload, these stressors exert much of the pressure experienced by soldiers across the full spectrum of operations. Although all exist to some degree during a COIN deployment, based on anecdotal observation and personal experience, isolation, ambiguity, workload, and danger appeared the most prominent during OIF 2006–2008.

^{*}MSW Program, Army Medical Department Center & School, 3630 Stanley Road, Suite 011-2, Fort Sam Houston, TX 78234.

[†]Behavioral Health Division, Carl R. Darnall Army Medical Center, 36000 Darnall Loop, Fort Hood, TX 76544.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu, uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	regarding this burden estimate or regarding this burden estimate or regarding the rega	or any other aspect of the 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE MAY 2012		2. REPORT TYPE		3. DATES COVE 00-00-2012	RED 2 to 00-00-2012	
4. TITLE AND SUBTITLE				5a. CONTRACT	NUMBER	
Mental Health Care Use by Soldiers Conducting Counterinsurgo Operations				5b. GRANT NUMBER		
Operations				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER			
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
MSW Program, An	ZATION NAME(S) AND AD cmy Medical Depart e 011-2,,Fort Sam H	ment Center & Sch	nool,3630	8. PERFORMING REPORT NUMB	G ORGANIZATION ER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)				
12. DISTRIBUTION/AVAII Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO MILITARY MEDI	otes ICINE, Vol. 177, Ma	ny 2012				
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC	17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON			
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	7	REST ONSIDEE I ERSON	

Report Documentation Page

Form Approved OMB No. 0704-0188

Isolation

Under most circumstances, leaving home to deploy to a far away land with an unfamiliar culture can create a sense of being isolated and alone. Feelings of isolation may be intensified for those assigned to small combat outposts (COP) separated from the rest of the unit. These soldiers have limited access to communications usually available on a large forward operating base (FOB), making it more difficult to maintain contact with family and friends back home. Additionally, the absence of amenities such as post exchanges and fast food establishments typically located on a FOB further removes these soldiers from the comforts of home. Moreover, consistent with COIN objectives, outposts are often shared with counterparts from the host nation's security forces. Language barriers, unfamiliar customs, and lingering distrust can create obstacles to establishing relationships with coalition partners even while living and working closely together.

Ambiguity

Changing missions, as necessitated by the implementation of a COIN strategy, can tax soldiers as they adapt to new tactics, techniques, and procedures. Those working in the combat arms may be most vulnerable to role confusion as they adjust to a combat role that prioritizes keeping local civilians safe rather than destroying an enemy. Furthermore, soldiers with previous conventional combat experiences must learn to operate tactically under different rules of engagement. With some Military Occupational Specialties (MOS) having limited application in COIN operations, soldiers detailed to work outside their MOS, such as a cannon crewmember manning a security check point or a chemical operations specialist supporting route clearance missions, may experience uncertainty as they perform new, unfamiliar duties.

Workload

The mental and physical demands of a deployment begin during the rigorous preparations before leaving home. Predeployment training including an intensive mission readiness exercise and cleaning, packing, and transporting equipment to the theater of operations can become physically exhausting and mentally draining as soldiers attempt to balance demands at work with the desire to spend time with their family before deploying. Once arriving in country, soldiers typically work long days with little respite even on weekends and holidays. Extreme climate and environmental conditions compound the physical demands of the daily routine. Multiple, and in some cases extended, deployments with limited time at home make it difficult for soldiers and families to mentally reset and emotionally reconnect before preparing for the next deployment.

Danger

All military operations contain some degree of risk but none more so than a deployment to a combat zone. This was particularly true during the first year of COIN operations in Iraq as casualty figures show 2007 to be the deadliest year of the war. ¹³ Improvised explosive devices (IED), vehicle-borne IEDs, sniper attacks, and indirect fire from rockets and mortars present a constant and unpredictable threat. Other hazards such as vehicle accidents and exposure to environmental toxins pose further risks that potentially can cause long-term consequences. In addition to the risk of physical injury, experiencing traumatic events may trigger psychological disorders most notably, post-traumatic stress disorder (PTSD).

METHODOLOGY

In this descriptive study, we utilized a retrospective record review protocol to examine the mental health case files of soldiers assigned to a BCT that operated from a large FOB in Iraq from November 2006 to January 2008. These individuals received care at the base's mental health clinic where we served as providers during OIF 2006-2008. Although the clinic supported multiple units, we focused on one brigade to be reasonably certain that the individuals included in the sample received similar predeployment training and operated under the same brigade tactics, techniques, and procedures. Also, to focus only on those who required mental health care, soldiers who were seen at the clinic for 1-time evaluations related to applications for Army schools or recruiter duty were excluded from the study. Over a 3-month period, 308 mental health records maintained by the brigade's mental health team were closely examined by two experienced Army-trained mental health specialists using a review form developed specifically for this study. Data collected included demographic information, date seen at the clinic, referral source, number of previous deployments, presenting problem, and type of mental health treatment provided. No personally identifying information was recorded to ensure anonymity. The completed forms were sent to the authors working at the Army Medical Department Center and School, Fort Sam Houston, Texas, for further review. After removing forms completed on soldiers from units other than the designated BCT, a total of 282 records were included in the final analysis. Frequencies and means were tabulated using the Statistical Package for the Social Sciences version 16. The Brooke Army Medical Center Institutional Review Board granted approval for this study.

RESULTS

Demographics

The records revealed that 234 (83%) males and 39 (14%) females received care at the mental health clinic. Nine records (3%) did not specify the client's gender. Excluding missing data from two records, the average age was 25 years with a range of 18 to 47 years. A total of 232 (83%) were between 18 and 29 years old, with only four individuals (1%) being 40 years or older. The majority, 173 (61%), identified themselves as Caucasian followed by 44 (16%) African Americans, 38 (14%) Hispanics, 11 (4%) Asian Americans, and 11 (4%) identified as "other." Ethnicity was not recorded in five (2%)

records. A little over half, 148 (53%), were married, while 102 (36%) reported being single, never married. A relatively small number, 28 (10%), were either divorced or currently separated from their spouse. Only four (1%) records had missing information on marital status. Most, 149 (53%), worked in support specialties such as military police, motor transport operator, wheeled vehicle mechanic, unit supply, or logistical specialist. A significant number, 105 (37%), served as an infantryman, cavalry scout, or armor crewman. A total of 27 medical personnel, including combat medics that directly supported outlying COPs, comprised 10% of the clinical sample. One (<1%) record did not include military specialty. The overwhelming majority, 271 (96%), came from the enlisted ranks with most, 193 (68%), being in the junior grades (E2–E4). Seventy-six (27%) junior noncommissioned officers (NCO) (E5–E6), two (<1%) senior NCOs (E7–E9), and 11 (4%) commissioned or warrant officers were formally treated at the clinic. Most, 188 (67%), were serving their first combat tour, whereas 78 (28%) had previous deployment experience, with five soldiers having deployed three or more times. Number of deployments was missing in 16 (6%) records.

Referral Information

The vast majority, 205 (73%), were self-referrals. Medical providers from Battalion Aid Stations and the Level II Troop Medical Clinic referred 25 (9%) individuals for evaluation and treatment. Unit leadership accounted for 24 (9%) referrals. Battalion Unit Ministry Teams referred 15 (5%) soldiers, and three (1%) clients indicated seeking assistance at the behest of peers. Ten (4%) records did not indicate referral source. December 2006, the BCT's first full month in Iraq, experienced the most referrals at 35 with no one initiating services in January 2008, the last partial month of the deployment. Date of initial appointment was not documented in one record (<1%).

Presenting Problem

Over half, 143 (51%), reported symptoms consistent with generalized operational stress characterized by mild depression, irritability, trouble sleeping, anxiety, conflict with supervisors, and, to a lesser extent, somatic complaints. Some described their chief complaint simply as stress. This cluster of problems is well represented by client statements written on intake questionnaires such as "unable to care about work," "feeling tired and upset," and being "stressed out." Exposure to direct combat, usually IED blasts, assaults by vehicleborne IEDs, rocket/mortar strikes, or sniper attacks, resulted in 48 (17%) soldiers receiving mental health support. Soldiers described anxiety over future missions, depression, sleep disturbances including nightmares, hypervigilance, flashbacks, and anger typically expressed toward unit leadership or the Iraqi population as common psychological reactions to combat. "Constant terror" was how one soldier adeptly described the feelings associated with conducting missions outside the relative safety of the FOB. Fifty-one (18%) individuals expressed concerns about problems back home. Partner relational problems, many compounded by suspected infidelity or unwanted divorce, financial burdens, and worries over child care were prominent home front issues. Generally, these individuals reported feeling depressed, angry, and experiencing sleep disturbances. Written comments such as "everything's falling apart" and "I need to get home" reflect the desperation experienced by these soldiers. The remaining individuals, 40 (14%), engaged mental health services for a wide array of reasons. Substance abuse, in spite of strict prohibitions against alcohol and drug possession, resulted in seven (2%) referrals for evaluation; three for alcohol use, two for inhalant abuse, one for abusing medication (diphenhydramine), and one for testing positive for cocaine on a predeployment urinalysis. Five (2%) were evaluated for panic attacks, three (1%) were seen for major depressive episodes, and one each (<1%) for bipolar and obsessive compulsive symptoms. Auditory hallucinations and paranoid delusions were reported by four (1%) soldiers. Nine (3%) asked for help in coping with grief from the loss of a battle buddy or the death of a family member. Three (1%) individuals requested assistance in working through psychological trauma resulting from childhood abuse. A total of seven (2%) soldiers requested refills for psychotropic medication prescribed before deployment.

Diagnoses

In keeping with a philosophy to not overpathologize soldiers seeking mental health care in theater, many were given no Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision (DSM IV-TR) diagnosis or were simply described as experiencing a Combat/Operational Stress Reaction. Likewise, the V Codes, Relational Problem, and Bereavement were applied when possible. As seen in Table I, Adjustment Disorders were the most commonly used mental health diagnosis. Anxiety Disorders, most notably Acute Stress Disorder and PTSD, afflicted a significant number of soldiers while Mood Disorders were found in relatively fewer cases. Although sleep disturbance was a commonly reported symptom, Primary Insomnia was diagnosed in those individuals who were only interested in seeking treatment for their sleep difficulties and reported no other symptoms. Substance abuse diagnoses were recorded in a handful of instances. Those who presented with psychotic symptoms were given a provisional or rule-out diagnosis with the understanding that further assessment, and time, would be needed at an inpatient facility before a complete diagnostic picture would emerge. Attention-Deficit Hyperactivity Disorder (ADHD) was diagnosed exclusively in those soldiers who deployed on ADHD medication and required refills during the deployment.

Suicidal Ideation

Of those individuals seen at the clinic, 43 (15%) expressed suicidal ideation. Most, 30 (70%), presented as self-referrals

TABLE I. Primary Axis I Diagnosis

Diagnosis	Number	%
No Diagnosis	76	27
Adjustment Disorder		
With Depression	33	12
With Anxiety	6	2
With Mixed Anxiety & Depressed Mood	6	2
With Disturbance of Conduct	3	1
Unspecified	18	6
V Codes		
Partner Relational Problem	23	8
Relational Problem NOS	3	1
Bereavement	3	1
Acute Stress Disorder	25	9
Post-traumatic Stress Disorder	23	8
Anxiety Disorder NOS	11	4
Dysthymia	10	4
Major Depressive Disorder	9	3
Primary Insomnia	8	3
ADHD	3	1
Obsessive Compulsive Disorder	3	1
Generalized Anxiety Disorder	3	1
R/O Psychotic Disorder	3	1
Panic Disorder		
With Agoraphobia	2	1
Without Agoraphobia	1	<1
Bipolar Disorder	2	1
Alcohol Disorder	2	1
Other Substance Abuse	2	1
Inhalant Abuse	1	<1
Missing Data	3	1

with 13 (30%) being referred by their command, unit chaplain, or medical personnel. The vast majority, 30 (70%), reported thoughts of suicide in conjunction with operational stress or a combat reaction, with relationship problems precipitating the remaining 13 (30%) to consider suicide. Thirty-three (77%) were found to be sufficiently at-risk to warrant recommending safety plans consisting of weapon restrictions and a 24-hour NCO escort be implemented at the unit. On average, safety plans remained in effect for 10 days with most not exceeding 7 days. Almost all, 40 (93%), were eventually returned to duty, but three individuals had to be medically evacuated because they could no longer be safely managed in theater.

Mental Health Intervention

Many, 115 (41%), of the soldiers treated at the mental health clinic received brief individual supportive therapy. Additionally, a significant number, 79 (28%), attended solution-focused group counseling emphasizing either life skills training (referred to as the combat operational fitness group), post-traumatic stress treatment, women's support, or relationship skills building. Although a substantial number of individuals, 88 (31%), were seen only one time, on average, soldiers attended five sessions, including the initial intake. Medication augmented the treatment of 89 (32%) mental health clients.

The most frequently prescribed medications were used to help soldiers obtain restorative sleep and included zolpidem, trazodone, and quetiapine. Selective serotonin reuptake inhibitors (SSRIs), specifically fluoxetine, sertraline, citalopram, and escitalopram, aimed at depressive and anxiety symptoms, were the second most often used medications. Benzodiazepines, such as lorazepam and clonzepam, were prescribed infrequently for the short-term management of acute anxiety. Some, 38 (14%), received multiple medications with an SSRI and a sleep aid, being the most often used combination. Overall, the vast majority, 259 (92%), were returned to duty with a small number of these, 21, limited to duty on the FOB for the remainder of the deployment. Only 12 soldiers (4%) had to be medically evacuated for psychiatric reasons, and six (2%) redeployed early for administrative purposes. Five (2%) records were missing information on final disposition.

DISCUSSION

Overall, the number of soldiers utilizing mental health care during the COIN campaign in OIF 2006–2008 was approximately 7% of the BCT, which, although a relatively small percentage, is somewhat higher than the 1 to 4% utilization rates estimated in a study conducted earlier in the war.¹⁴ Medical providers, unit leaders, and chaplains were prominent referral sources in addition to self-referrals. We discovered the typical mental health client to be a 25-year-old, male, junior enlisted soldier with no previous combat deployments who voluntarily sought help for psychosocial symptoms related to operational stress or exposure to combat. Consistent with findings from a study conducted during the Iraqi governance phase of OIF, 15 relatively few senior NCOs and officers formally received mental health care. Although a small portion of the clinical sample, we found that females manifested combat and operational stress reactions in ways similar to their male peers and that in contrast to a report that females tend to be disproportionately evacuated for psychiatric reasons, 16 none required evacuation during the 15-month deployment.

Although certainly not unique to COIN operations, as suggested by Bartone's operational stressors, the deployment environment appears to have significantly influenced the underlying problems and specific symptoms presented by mental health clients. Understandably, the cognitive stress associated with the initial implementation of a COIN strategy, characterized by tactical changes, extended deployments, and more restrictive rules of engagement, produced anxiety and frustration that when combined with a physically draining climate and an exhausting workload created conditions ripe for operational stress reactions. Similar experiences were reported in the early phases of the more conventional Persian Gulf War.¹⁷ Somewhat surprising, combat exposure was a significant factor for many seeking mental health services even though COIN is considered within the realm of low-intensity conflict. One explanation for the high degree of combat exposure could be the absence of a clear demarcation between

ongoing combat operations and the implementation of stability operations to support the nascent Iraqi government. 18 Adjustment disorders, along with acute and post-traumatic stress disorders, are predictable sequelae for those who confront the unpredictable threat of an active insurgency. However, as seen in the MHAT VI findings, as a COIN mission matures and combat exposure declines, mental health problems may decrease accordingly. ¹⁹ From the home front perspective, being physically, and perhaps emotionally, isolated from loved ones can stress healthy relationships and may contribute to the demise of troubled ones. The distress generated by deteriorating relationships seems to lead to a sense of helplessness and depression as soldiers struggle with the inability to return home to save strained relationships. The large number of soldiers requesting help during the first month in Iraq suggests that some may have deployed with preexisting problems or that coping skills, already taxed by predeployment preparations, became quickly overwhelmed by the initial operational demands.

Although suicide prevention has become an increasingly important military initiative, managing at-risk soldiers in a combat zone remains a challenge. Suicidal ideation complicated the clinical management of a significant number of clients. Effectively responding to suicidal risks in-theater requires, in part, distinguishing between legitimate expressions of severe distress from those seeking the secondary gain of being sent home early or, at a minimum, hoping to be restricted to duty inside the FOB. Regardless of the individual's motivation, our findings show that a safety plan designed to reduce the opportunity to act impulsively, implemented at the unit, and monitored by the mental health team creates a network that mitigates risk and helps to keep the soldier contributing meaningfully to the unit's mission.

Although it is difficult to establish a relationship between the onset of psychotic symptoms and the deployment, it is possible that operational stress may have influenced the timing of the symptoms. Nevertheless, it is just as likely that these individuals could have become symptomatic back home. Substance abuse—primarily inhalants and alcohol—seems particularly problematic given the risks individuals took to use prohibited substances in defiance of a general order. The absence of specialized substance abuse treatment programs in the combat zone put the onus on the supporting mental health team to address the problem.

A multidisciplinary mental health program was accessible to everyone serving in the area of operations. Sufficient resources were available so that soldiers received care near their unit with none being sent to combat stress restoration centers outside the brigade area. Therapeutic interventions were generally brief, averaging five sessions, and typically employed cognitive-behavioral concepts to enhance coping skills and strengthen resiliency. Psychopharmacologic treatment proved to be an essential adjunct to the counseling program. Certain classes of hypnotic medicines such as nonbenzodiazepines, benzodiazepines, and sedating anti-depressants along with SSRIs were particularly beneficial

at reducing the severity of targeted symptoms, thus allowing soldiers to more effectively participate in treatment. Benzodiazepines were used sparingly since duty restrictions were required because of the central nervous system depressing side effects as well as the risks of tolerance and dependence. However, in cases of overwhelming acute anxiety, benzodiazepines were prescribed over short courses to great effect. The greater than 90% return to duty rate reflects the expectation that everyone would recover sufficiently to remain with their unit and that evacuation for psychiatric reasons was an option of last resort. Unfortunately, since the records only covered the period soldiers were deployed to Iraq, we are unable to assess long-term outcomes of mental health intervention.

IMPLICATIONS AND CONCLUSIONS

Findings from an exploratory study based on descriptive data obtained from a retrospective records review have limited predictive value and should be cautiously generalized. Although mindful of the study's limitations, we believe the results contribute to our emerging understanding of how to best support future COIN contingencies. Foremost, we believe, it is important to acknowledge that COIN deployments create substantial stress that begins to accumulate during predeployment preparations. Therefore, mental health support must be accessible before leaving home. Ideally, mental health providers will identify and assist at-risk soldiers, particularly those with deployment-disqualifying mental health disorders or those taking psychotropic medications prohibited in theater.

Once deployed, mental health operations should be established quickly to accommodate a potential early influx of clients. Furthermore, with COIN deployments lacking the traditional boundaries of conventional operations, everyone is exposed to psychosocial stressors including the threat of insurgent attacks. Thus, adequately supporting a COIN deployment requires ensuring that all personnel have access to a comprehensive mental health program that includes psychotropic medication and can respond to a wide spectrum of mild to severe mental health symptoms. The mental health team should remain aware of the degree of combat exposure experienced by supported units and provide outreach to those heavily engaged in combat operations. This may become more challenging as battlespaces expand and COPs become further isolated. Advances in telemedicine capabilities may need to be leveraged in order to deliver mental health care to soldiers in outlying areas. Similar to other military deployments, an effective mental health program would flexibly offer a variety of therapeutic interventions that utilizes individual and group modalities to address a wide range of needs whether it requires strengthening resiliency, reducing stress, or treating psychopathology. And, although substance abuse appears to be occurring in low numbers, consideration should be given to incorporating drug and alcohol abuse prevention measures in theater.

Highly functioning, professional soldiers are essential to the success of all military operations, nowhere is this truer than in achieving strategic COIN objectives. Continuing to develop insight into the psychological demands placed on those conducting COIN operations is critical to understanding how we can better provide for those who bear the burden of securing operational success.

REFERENCES

- Aylwin-Foster N: Changing the army for counterinsurgency operations. Mil Rev 2005; November–December: 2–15.
- Sepp KI: Best practices in counterinsurgency. Mil Rev 2005; May– June: 8–12.
- Field Manual 3-24.2: Tactics in Counterinsurgency. Washington, DC, U.S. Department of the Army, 2009.
- 4. Kilcullen D: Counterinsurgency redux. Survival 2006; 48(4): 111–30.
- Mental Health Advisory Team (MHAT) V: Operation Iraqi Freedom 06–08; Operation Enduring Freedom 8, Afghanistan. Washington, DC, Office of the Surgeon General, U.S. Department of the Army, February 14, 2008, p 26. Available at http://www.armymedicine.army.mil/reports/ mhat_v/MHAT_V_OIFandOEF-Redacted.pdf; accessed August 10, 2009.
- Chaudhury S, Goel DS, Singh H: Psychological effects of low intensity conflict (LIC) operations. Indian J Psychiatry 2006; 48(4): 223–31.
 Available at http://www.indianjpsychiatry.org/article.asp?issn=oo19-5545; accessed November 17, 2009.
- Defence Research and Development Organization: Defense Institute of Psychological Research Studies on Stress on Indian soldiers. November 21, 2007. Available at http://www.india-defence.com/reports/3626; accessed November 17, 2009.
- Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL: Combat duty in Iraq and Afghanistan, mental health problems and barriers to care. N Engl J Med 2004; 351: 13–22.

- Lamberg L: Military psychiatrists strive to quell soldiers' nightmares of war. JAMA 2004; 292(13): 1539–40.
- Grieger TA, Cozza AJ, Ursano RJ, et al: Postraumatic stress disorder and depression in battle-injured soldiers. Am J Psychiatry 2006; 163(10): 1777–83
- 11. Bartone PT, Adler AB, Vaitkus MA: Dimensions of psychological stress in peacekeeping operations. Mil Med 1998; 163(9): 587–93.
- Bartone P: Resilience under military operational stress: can leaders influence hardiness? Mil Psychol 2006; 18(Suppl): S131–S148.
- 13. Defense Manpower Data Center: Data, Analysis and Programs Division, Global War on Terrorism—Operation Iraqi Freedom, March 19, 2003 through February 7, 2011. Available at http://www.fedstats.gov/key_stats/index.php?id=DMDC; accessed February 16, 2011.
- 14. Chappelle W, Lumley V: Outpatient mental health care at a remote U.S. Air Base in Southern Iraq. Prof Psychol Res and Prac 2006; 37(5): 523–30.
- Felker B, Hawkins E, Dobie D, Gutierrez, McFail M: Characteristics of deployed Operation Iraqi Freedom military personnel who seek mental health care. Mil Med 2008; 173: 155–8.
- Rundell JR: Demographics of and diagnoses in Operation Enduring Freedom and Operation Iraqi Freedom personnel who were psychiatrically evacuated from the theater of operations. Gen Hosp Psychiatry 2006; 28: 352–6.
- 17. Gifford RK, Ursano RJ, Stuart JA, Engel CE: Stress and stressors of the early phases of the Persian Gulf War. Phil Trans R Soc B 2006; 361: 585–91.
- Chiarelli PW, Michaelis PR: Winning the peace: the requirement for full-spectrum operations. Mil Rev 2005; July

 –August: 4–17.
- Mental Health Advisory Team (MHAT) VI: Operation Iraqi Freedom 07–09. Washington, DC, Office of the Surgeon General, U.S. Department of the Army, May 8, 2009. Available at http://www.armymedicine. army.mil/reports/mhat_v/MHAT_VI_OIF-Redacted.pdf; accessed September 20, 2011.
- Hill JV, Johnson RC, Barton RA: Suicidal and homicidal soldiers in deployment environments. Mil Med 2006; 171(3): 228–32.